REMARKS

Claims 1-3 are all the claims pending in the application.

Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terayama et al. (US Patent No. 5,645,741) and Stava (US Patent No. 5,148,001).

Rejection of claims 1-3 under 103(a) based on Terayama et al. and Stava

The present invention is related to an apparatus that can perform both short circuit arc welding and pulse arc welding.

Specifically the present invention, as recited in claim 1, requires a rectifier circuit that converts an AC into a DC. An inverter circuit converts the output of the rectifier circuit to a high-frequency AC. A transformer converts the output of the inverter circuit to a voltage suitable for arc welding. A second rectifier circuit rectifies the output of the transformer to a DC. A first reactor is connected to the second rectifier circuit. Importantly, a current circuit is connected in parallel to the second rectifier circuit with a reactance that is larger than a reactance of the first reactor.

The Applicants amend claim 1 to recite specifically that a voltage that is applied to the current circuit from the transformer is higher than a voltage that is applied to the second rectifier circuit from the transformer. Further, it is additionally recited that an output voltage of the current circuit is higher than an output voltage of the second rectifier circuit.

Terayama does not disclose the difference between the voltages respectively applied to the auxiliary power rectifier DR4 and the secondary rectifier DR2 which are connected in

parallel to T1. Rather, from Figs. 3 and 5 of Terayama, it is clear that the same voltages are applied. It should be noted that the number of windings on the secondary side are the same.

To the contrary, in the present invention, the output voltage of the current circuit 10 is consistently higher than the output voltage of the second rectifier circuit 5. Specifically, the examples of Figs. 1 and 2 of the present invention shows that the ratio of the output voltages are 3:2, according to the ratio of the numbers of the windings of the transformer 4.

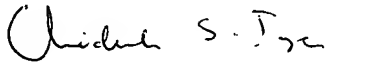
The Applicants refer the examiner to the attached Appendices 1 & 2 where the above discussed feature is clarified further.

Claims 2 and 3 are allowable at least based on their dependency.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Chid S. Iyer
Registration No. 43,355

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

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